

USSN: 10/712,512
Response to Office Action Dated 12/14/2006

MAY 02 2007

REMARKS

Reconsideration of the above-identified application in view of the following remarks is requested.

Claims 1-19 are currently before the Examiner.

Claims 1-3, 5-9 and 11-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by Desor *et al.*, U.S. Patent No. 6,005,042. The rejection is respectfully traversed.

The office action states that the polymer product of Desor *et al.* is considered to be equivalent to that of applicants even though it may have been derived by a different process, that applicants have not clearly shown that the dispersion of the present invention differs from that of Desor *et al.*, and that such differences are attributable to the reversion of the process stage involved. Therefore, the Examiner maintains that the process of Desor *et al.* would provide a product that is essentially the same as applicants' claimed dispersion.

The present application produces a product with improved hot block-resistance, gloss on gloss, and film formation at low temperatures over Desor *et al.* The method of the present application produces a product different from that of Desor *et al.*, and such differences are attributable to the reversion of the process stages involved.

The present application teaches and claims a first stage polymerization of "hard" monomers (T_g of at least 50°C) and a second stage polymerization of "soft" monomers (T_g about -30 to about 10°C). Therefore, the present application claims a "hard polymerization stage" followed by a "soft polymerization stage." Conversely, Desor *et al.* require a "soft polymerization stage" followed by a "hard polymerization stage." Polymerization of a "hard" monomer contributes to the block resistance of the polymer. Polymerization of a "soft" monomer contributes to the gloss and film formation of the polymer can be used to indicate different polymer products.

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In order to concretely demonstrate that the currently claimed process produces a product different from Desor *et al.*, applicants have analyzed polymers made from the currently claimed process and polymers made from the process of Desor *et al.* Applicants herewith submit a Declaration pursuant to 37 C.F.R. § 1.132, from Pavel Holub, the inventor named in the present application, stating that the currently claimed process produces a product different than the process of Desor *et al.*

Claims 1-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Desor *et al.* as applied to claims 1-3, 5-9 and 11-19 above, and further in view of Gray *et al.* U.S. Patent No. 6,875,834. The rejection is respectfully traversed.

Specifically the office action states that the present application differs from Desor *et al.* in that the reference does not include the specific strong acid monomers of applicants' claim and it would have been obvious to include an acidic monomer, such as phosphoethyl methacrylate, as taught by Grey *et al.* in the monometric compositions of Desor *et al.* to achieve enhanced durability.

In response, applicants refer to the above discussion and state that the teaching of Gray *et al.* does not cure the deficiency of the opposite stage arrangement of the present application when compared to that taught by Desor *et al.* The combination does not teach or suggest the dispersions of the invention, prepared by a first hard polymerization stage, followed by a second soft polymerization stage, would result in coatings or films having improved block resistance, gloss on glass, and enhanced film formation at low temperature, as presently disclosed and claimed.

In light of the above remarks, it is respectfully submitted that the pending claims of the present application are in condition for allowance.

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If it would be of assistance with this application, the Examiner is invited to contact the undersigned.

Respectfully submitted,


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